READING MATERIAL
THE CLEAN AIR ACT

What Is the Clean Air Act?

The original Clean Air Act was passed in 1963, but our national air pollution control program is actually based on the 1970 version of the law. The 1990 Clean Air Act Amendments revised the 1970 law.

The overall goal of the 1990 Amendments is to reduce pollutants in our air by 56 billion pounds a year—224 pounds for every person in the country—by the time the law is fully implemented in 2005. The new law builds on the strengths of the Clean Air Act of 1970 and the environmental lessons learned over the past 20 years. As the goals of the law are met, we will be breathing cleaner air every year.

What Does the Clean Air Act Cover?

Two kinds of pollutants are regulated under the Clean Air Act. There are only six in the first group, which are called "criteria" pollutants. These pollutants—carbon monoxide, nitrogen dioxide, sulphur dioxide, ozone, lead, and particulate matter— are discharged in relatively large quantities by a variety of sources, and they threaten human health and welfare across broad regions of the country. EPA sets national standards for each of the criteria pollutants, and the states must take action to ensure the standards are met. Failure to meet the standards is called "non-attainment." Many urban areas are classified as "non-attainment areas" for at least one criteria air pollutant.

The other kind of pollutants—and there are hundreds in this group—are the ones that are immediately hazardous to human health and are associated with specific sources. Some of these air toxics are cancer-causing; some produce other health and environmental problems. The threat is highest for people living near large industrial facilities or in heavily polluted urban corridors.

The list of toxics emitted into the air is a long one, and it includes some familiar names. Benzene, for example, is a potent cancer-causing substance. Gasoline sold in the United States is, on average, 1.6 percent benzene. Eighty-five percent of human exposure to benzene comes from gasoline.

A second example is mercury. Mercury is a metal found in trace amounts in coal and is released to the air when the coal is burned. Mercury also is released by incinerators burning garbage. It is used in latex paints to prevent mildew, and as the paint weathers, substantial amounts of mercury may be released into the air.

Another aspect of air-toxics regulation focuses on the sudden and potentially catastrophic chemical accident. For the period 1982 to 1986, accidental releases of toxic chemicals in the United States caused 309 deaths, 11,341 injuries, and the evacuation of 464,677 people from homes and jobs. The most publicized accidental release of dangerous chemicals occurred at Bhopal, India, in 1984, when 3,000 were killed and over 200,000 injured.

What Are the Requirements of the Clean Air Act?

Areas of non-attainment for criteria pollutants have been classified according to the extent of pollution. The five classes range from marginal (relatively easy to clean up quickly) to extreme (will take a lot of work and a long time to clean up). The 1990 Clean Air Act uses these classes to tailor cleanup requirements to the severity of the pollution and set realistic deadlines for reaching cleanup goals. If deadlines are missed, the law allows more time to clean up, but usually a non-attainment area that has missed a cleanup deadline

must meet the stricter requirements set for more polluted areas.

States do most of the planning for cleaning up criteria air pollutants using a system of permits to make sure power plants, factories, and other pollution sources meet their cleanup goals. A variety of cleanup methods are required in non-attainment areas, many of which involve motor vehicles. Cleaner fuels, cleaner new vehicles, better maintenance programs for vehicles on the road, and mass transportation may be required. Also, as the pollution gets worse, pollution controls will be required for smaller sources of pollution.

The regulatory program for air toxics in the 1990 amendments reflects an entirely new approach. The new law names 189 toxic air pollutants. Typically, they are carcinogens, mutagens (substances that can cause gene mutations), or reproductive toxins, and their sources usually are specific industries. EPA must identify categories of the major sources of these chemicals and then develop "maximum achievable control technology" (MACT) standards for each category over the next 10 years. These standards are to be based on the best control technologies that have been demonstrated in these industrial categories. State and local air pollution agencies will have primary responsibility to make sure industrial plants meet the standards.

In setting the MACT standards, EPA will look only at pollution control equipment and pollution prevention methods, such as substituting nontoxic chemicals for the toxic ones currently in use. The new law favors setting standards that industry must achieve, rather than dictating equipment that industry must install. This flexibility will allow industry to develop its own cost-effective means of reducing air toxics emissions and still meet the goals of the act.

The law includes unique incentives for industries to reduce their emissions early, rather than waiting for federal standards. Sources that reduce emissions by 90 percent or more before the MACT standards go into effect will have six additional years to comply with them. This "early reduction program" should lead to significant reductions in air toxics both immediately and into the future.

Other parts of the Clean Air Act establish a program for the prevention of accidental releases of air toxics from industrial plants and create a Chemical Safety Board to investigate accidental releases of air toxics from industrial plants.

What Happens If You Don't Comply?

The Clean Air Act establishes "enforcement" methods that can be used to make polluters obey the laws and regulations. Enforcement methods include citations (like traffic tickets) for violators of the law, fines, and even jail terms. The knowing violation of almost every requirement is now a felony offense. EPA and state and local governments are responsible for enforcement of the Clean Air Act, but if they do not enforce the law, members of the public can sue EPA or the states to get action. Citizens also can sue violators apart from any action taken by EPA or state or local governments.

Before the 1990 Clean Air Act, all enforcement actions had to be handled through the courts. Now, in some cases, EPA has the authority to fine violators without going to court first. The purpose of this new authority is to speed up compliance with the law and reduce court time and cost.

References and Suggested Reading

Air and Waste Management Association. *Environmental Resource Guide: Air Quality*. Pittsburgh, PA: Air and Waste Management Association (1991).

Bryner, Gary C. *Blue Skies, Green Politics: The Clean Air Act of 1990*. Washington, DC: CQ Press (1992).

Klaber, K. A., K. N. Weiss, and J. W. Gallagher. "Charting a Course through the Clean

Air Act Amendments." *National Environmental Journal*, (November 1993)

Scott, Geoff. "Cleaning Up Our (Air) Act (Clean Air Act of 1990)." *Current Health*, 18 (2 April 1992) p. 22.

U.S. EPA. *Office of Radiation and Indoor Air: Program Description*. Washington, DC: U.S. EPA, Office of Air and Radiation EPA/402/K-93/002 (June 1993).

—. *Plain English Guide to the Clean Air Act*. Washington, DC: U.S. Environmental Protection Agency EPA/400/K-92/002 (1993).